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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/051,359

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT

PAPER NUMBER

2629

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/051,359

Applicant(s)

ASANO ET AL.

Examiner

Srilakshmi K. Kumar

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2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 16, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

The following is in response to the Request for Continued Examination, filed on April 16, 2007.

Claims 1-7 are pending. Claims 1 and 6 have been amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al (US 6,351,327 B1) in view of Brody (US 4,982,273) and further in view of Matsuo et al (US 5,414,547).

As to independent claim 1, Kimura et al disclose an organic electroluminescent display (col. 19, line 66-col. 20, line 7, and Fig. 1, item 100) having active matrix circuitry (col. 20, lines 9-25), the organic electroluminescence display comprising; a substrate (Fig. 1, item 1); a device layer provided on the substrate (col. 20, lines 20-25), the device layer comprising a plurality of luminescent devices (Fig. 1, item 224) defining pixel units (Fig. 1, item 10) arrayed in a matrix (Fig. 1, col. 20, lines 26-40), each luminescent device having an emitting area that emits independently of the emitting areas of the other luminescent devices (col. 1, lines 39-44, where in Fig. 1, item 224 shows the individual luminescent device per pixel independent from other pixel emitting areas); a circuitry layer provided between the substrate (Fig. 1) and the device layer, the circuitry layer comprising pixel circuits for driving the respective luminescent devices (col. 1, lines 24-58), the pixel circuits defining the pixel units (Fig. 1, item 10, col. 20, lines 26-

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40); Kimura et al do not disclose contacts, electrically connecting each of the luminescent devices with a corresponding pixel circuit. Brody discloses contacts (Figs 4b and 4c, item 27, col. 7, line 54-col. 8, lines 18), where in Fig. 4b, the contacts (27) are shown to be at the edges of the emitting areas. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the contacts of Brody into Kimura et al as the contacts for the row or column of the display as disclosed by Brody in col. 2, lines 65-col. 3, lines 20 improve image quality. Kimura et al as modified by Brody do not disclose wherein the contact is provided between adjacent emitting areas of the luminescent devices. Matsuo et al disclose a display device comprising contacts (Fig. 24, item 207) wherein the contact is provided between adjacent emitting areas (201bb, 201cb, etc. being the pixel emitting areas, and the contacts being provided in between the pixel areas). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the contacts between adjacent emitting as taught by Matsuo et al into Kimura et al as modified by Brody as the having the contacts provided between the adjacent emitting areas increases the emitting/display area (Matsuo et al, col. 2, lines 45-68).

As to independent claim 6, limitations of claim 1, and further comprising, Kimura et al disclose an organic layer including a luminescent layer and lying between the upper electrode and the lower electrode (col. 20, lines 26-40). Kimura et al do not disclose wherein each lower electrode has a contact electrically connecting the corresponding luminescent device with the corresponding pixel circuit, and wherein the upper electrode is not provided over the contact. Brody discloses wherein each lower electrode has a contact electrically connecting the corresponding luminescent device with the corresponding pixel circuit (Figs 4b and 4c, item 27, col. 7, line 54-col. 8, lines 18), and wherein the upper electrode is not provided over the contact,

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as in Fig. 4b, the contacts (27) are shown to be at the edges of the emitting areas. It would have been obvious to one of ordinary skill in the art to include the contacts of Brody into Kimura et al as the contacts for the row or column of the display as disclosed by Brody in col. 2, lines 65-col. 3, lines 20 improve image quality. Kimura et al as modified by Brody do not disclose wherein the contact is provided between adjacent emitting areas of the luminescent devices. Matsuo et al disclose a display device comprising contacts (Fig. 24, item 207) wherein the contact is provided between adjacent emitting areas (201bb, 201cb, etc. being the pixel emitting areas, and the contacts being provided in between the pixel areas). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the contacts between adjacent emitting as taught by Matsuo et al into Kimura et al as modified by Brody as the having the contacts provided between the adjacent emitting areas increases the emitting/display area (Matsuo et al, col. 2, lines 45-68).

As to dependent claim 2, limitations of claim 1, and further comprising, Brody discloses a flat screen color display comprising an active matrix and wherein the contacts are arrayed in a single dimension for each row or column in the matrix in Figs. 4a and 7 and in col. 7, line 54-col. 8, lines 18.

As to dependent claim 3, limitations of claim 2, and further comprising, Brody discloses a flat screen color display comprising an active matrix and wherein the contacts for the pixel units belonging to two adjacent rows or columns in the matrix are arrayed in a single dimension between the two adjacent rows or columns in Figs. 4a and 7 and in col. 7, line 54-col. 8, lines 18.

As to dependent claim 4, limitations of claim 1, and further comprising, Kimura et al disclose wherein the luminescent devices are organic electroluminescent devices (col. 20, lines

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29-30), each comprising a first electrode, a second electrode and an organic layer including an luminescent layer and lying between the first electrode and the second electrode (col. 20, lines 41-62).

As to dependent claims 5 and 7, limitations of claims 1 and 6, and further comprising, Kimura et al disclose wherein the pixel circuits (Fig. 1, item 10) each comprise a thin film transistor (Fig. 1, item 223, col. 20, lines 26-40).

Response to Arguments

3. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 571 272 7769. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Srilakshmi K Kumar
Examiner
Art Unit 2629

SKK
June 18, 2007


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER